

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLN. NO. 10/032,539

REMARKS

Reconsideration is respectfully requested in view of Applicant's amendments and remarks herein.

The Examiner will note that claim 1 has been amended to recite that the claimed glass substantially does not comprise CuO. Support is from original claim 4.

In the present invention, a polarizing glass is prepared which is improved in that it does not contain metallic silver and crystals other than silver halide as deposited crystals, which if present deteriorate polarizing characteristics such as extinction ratio and insertion loss.

At the middle of page 3 of the Office Action, claims 1-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tajima et al. in view of Yamashita et al.

The Examiner cites Tajima et al. as disclosing a generalized process for forming the type of polarizing glass as set forth in Applicant's claims. The Examiner then turns to Yamashita et al. as describing the type of glass to be used in the process of Tajima et al. for resulting in the present invention.

As the Examiner recognizes, Tajima et al. although teaching a process for producing a polarizing glass containing oriented shape-anisotropic metallic particles fails to teach a particular glass composition within the present claims. But Applicants must respectfully submit that Yamashita et al. also does not teach a glass composition of the present claims.

The glass taught by Yamashita et al. comprises 0.002-0.03% CuO. Therefore, since the glass employed in the present claims does not comprise CuO, the combination as suggested by the Examiner cannot lead to the present invention. Reconsideration and withdrawal of the rejection based on Tajima et al. in view of Yamashita et al. are respectfully requested.

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At the middle of page 4 of the Office Action, claims 1-7 are rejected under 35 U.S.C. § 103(a) as being obvious to one of ordinary skill in the art over Borrelli et al. in view of Prassas.

Borrelli et al. is cited as teaching a process for producing a polarizing glass containing silver halide particles, but fails to teach a particular glass composition of the present invention, especially, on the addition of ZrO_2 . Prassas is cited to teach a high index photochromic glass having a specific glass composition comprising ZrO_2 . The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify a polarizing glass of Borrelli et al. as suggested by Prassas.

However, the glass taught by Prassas is different from the glass of Claim 1 in the ratio of content of K_2O to those of Na_2O and Li_2O ($K_2O > Na_2O$ and Li_2O). Thus the combination of the glass of Prassas with the process of Borrelli et al. does not result in the invention of Claim 1.

In addition, as seen from comparison of the data of embodiments of the present invention shown in Table 1 (page 11) and the data of Comparative Example 2 which is the data of the glass of Borrelli et al. (JPA-56-169140) shown in Table 1 (continued) (Page 12), the polarizing glass of the present invention exhibits superior optical and polarizing properties over that of Borrelli et al. As described in the second paragraph from the bottom on page 16, photochromism and change of appearance of glass upon heat treatment were observed in the glass of Borrelli et al.

In the glass of the present invention, basicity of the glass is increased, *inter alia*, from the inclusion of K_2O in the defined ratio.

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Toward the bottom on page 5 of the Office Action, claims 1-3 and 5-7 are rejected under 35 U.S.C. § 103(a) as being obvious to one of ordinary skill in the art over Borrelli et al. in view of of Suzuki et al.

Borrelli et al. is again cited to teach a process for producing a polarizing glass, but fails to teach a particular glass composition of the present invention. Suzuki et al. teach a photochromic gradient lens glass having a specific glass composition and the Examiner sets forth that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a glass of Borrelli et al. as suggested by Suzuki et al.

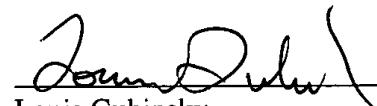
However, the glass taught by Suzuki et al. comprises 0.006% CuO. In contrast, the glass employed in the invention of Claim 1 substantially does not comprises CuO. Thus the combination of the glass of Suzuki et al with the process of Borrelli et al. does not result in the invention of Claim 1 and therefore, Claim 1 is patentable.

Applicants respectfully submit that all claims are now in condition for allowance. If any minor points remain prior to notice of allowance, the Examiner is respectfully requested to contact the undersigned at the below listed phone number.

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Respectfully submitted,



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anisotropic silver particles are metallic Ag particles, and said glass substantially does not
comprise CuO.

4. The polarizing glass according to claim 1 wherein the glass substantially ~~does not~~
~~comprise CuO and~~ ~~o~~ substantially does not exhibit photochromic characteristics.



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